

Appl. No. 09/943,744

Amtd. Dated Feb. 02, 2004

Reply to Office Action of September 9, 2003

## REMARKS

### *Summary of present claim set with changes in italics:*

Claims 1-137 previously cancelled.

Claims 138-141 pending; *claims 138, 141 here amended*

*Claim 142 here cancelled.*

Claims 143 pending.

*Claim 144 here cancelled.*

Claims 145-198 pending; *claims 169, 170, 172, and 173 here amended.*

Claims 199-201 previously cancelled.

*New claims 202-204 added.*

### *Priority Claim*

Applicant requests that the Office acknowledge the claim of priority under 35 USC Section 119(e). The present application claims the benefit of U.S. Provisional Application Nos. 60/229,242 filed August 30, 2000; 60/229,708 filed August 31, 2000; 60/313,835 filed April August 20, 2001 and 60/314,053 filed August 22, 2001.

### *New amendments to claims and new claims*

Consistent with the description in the specification, e.g. page 14, the prosecution history, and the interview discussion at the Office attended by the inventor/applicant, the base claims are here amended so as to characterize the claimed fiber bundles and specific yarns as being an "intimate blend" of fibers. This is a well understood industry term for joining different fibers, necessarily staple fibers, before or at the picker, (no connection to corespin techniques), into a very uniform mixture. (Re Dictionary of Fiber & Technology, Kosa, 1999) The Applicant has further described the term in his specification and employed it in the present amendments as meaning that the fibers are "aligned", which again precludes any sort of corespun geometry, and have "direct and intimate contact" with each other. No fiber is necessarily concealed within an intimate blend fiber bundle or yarn as is true of a corespun product; any fiber of an intimate blend of fibers may be exposed but always in the intimate company of other exposed fibers. This is why, for example, a fabric or article made from intimate blend yarns consisting of different types of fibers is able to be

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dyed to a visually uniform color density, when certain fibers, such as high tenacity fibers of certain materials, are otherwise difficult to dye. It should also be noted that the limitation of forming an "intimate blend" of fibers at or before the picker inherently requires the use of staple fibers and not continuous filaments, another limitation not applicable to a corespun geometry and product. It should be further noted that the bulk and weight of corespun products as a whole makes them unsuitable for applications and configurations described and claimed here, such as in the claimed cover factors and in the weight limits of new claims 202-204. For all of these reasons, Applicant asserts as a general statement that it would be difficult to support a rejection of the present claims with any corespun art. Corespun geometry is simply the antithesis of an intimate blend of fibers in the context of this invention. To put it bluntly, there is *no core*, and *no cover*, in an intimate blend yarn of the invention.

Additionally, the prior amendments discussed at the interview were specifically intended and acknowledged to overcome previous rejections based on corespun art, which rejections were subsequently withdrawn.

Furthermore, Applicant asserts that neither the prior amendments nor the present amendments or new claims introduced then or now add any new matter or new basis for further search, or new grounds for rejection. The amendments simply amplify and clarify limitations already discussed and presented.

#### *Claim Rejections – 35 USC § 103*

In paragraph 4 of the Office Action, the Office rejected Claims 138-191, and 194-198 under 35 USC 103(a) as being unpatentable over US Patent No. 6,534,175 issued to Zhu et al. in view of US Patent 5,565,264 issued to Howland.

According to the MPEP §2143.01, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art." Also, "The combination of

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elements from nonanalogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. The knowledge cannot come from the applicant's invention itself." *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1442 (Fed. Cir. 1992)

Zhu's Fig. 2 is mischaracterized by the Office on page 3, 2nd sentence, as analogous to the claimed invention. Zhu discloses a core and sheath yarn, Fig. 3, as part of a yarn bundle. Fig. 2. The sheath of the yarn of Fig. 3 is described at col. 2, line 34, as having a sheath of "continuous filaments a plurality of which are applied...around metal fiber core *at an angle nearly perpendicular with the axis of the core to cover the core.*"

First, the corespin geometry with its continuous filaments is the antithesis of the claimed invention. Second, the mischaracterization of Zhu's Fig. 2 is readily apparent upon reading the specification, and flaws the logic of the rejection. Third not withstanding the tendency to interpret the drawing in accordance with the claim with the benefit of hindsight, the text clearly describes the fibers of the sheath as perpendicular with the axis, in stark contradiction to the claim limitation of "normal to the cross section". Forth, the stated objective of the sheath is to cover the core, in stark contradiction to the clear meaning of the "intimate blend" limitation of the Applicant's base claims. Fifth, the size of the Zhu yarns makes it virtually impossible to conform to the configurations described and claimed by this Application. For all of these reasons, Zhu cannot alone or in combination support a 35USC103(a) rejection of the claims. Applicant urges that Zhu be withdrawn as a reference and the rejection be likewise withdrawn as not supported with respect to all claims.

Applicant further respectfully submits that the Office has fabricated an improper combination of references, in that, when taken as a whole, there is no motivation or suggestion to combine the non-analogous core and sheath references with the Howland '264 reference to

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achieve the Applicant's claimed invention. Section 2143.01 of the MPEP states: "The mere fact that references can be combined or modified [for any purpose] is not sufficient to establish *prima facie* obviousness [in the instant case]." In addition, the "level of skill in the art cannot be relied upon to provide the suggestion to combine references." Thus, it is inappropriate to dissect and use the elements of the Applicant's claims as a menu for selecting a combination of references to form a 103 rejection. Rather, there must be some objective reason to combine the teachings of the corespun references with the Howland '264 reference to make the claimed invention. Applicant cannot find such an objective reason. For this further reason, Applicant urges the combination be voided and the rejection withdrawn with respect to all claims.

In paragraph 5 of the Office Action, the Office rejected Claims 138-141, 143, 147, 149-154, 162, 167-169 under 35 USC 103(a) as being unpatentable over US Patent No. 6,146,759 issued to Land in view of US Patent 5,565,264 issued to Howland.

Applicant invokes its prior comments with respect to corespun art, 35USC 103(a), improper combinations and the claims. Applicant respectfully asserts that the Land patent is specific to and exclusively about using a core spun yarn construction and as has been argued by Applicant in prior correspondence in this case, which is hereby incorporated by reference, is not relevant to or suggestive of the Applicant's art of intimately blended fiber types wherein the different fiber types are at least partially exposed so as to be seen, and/or contacted by dye, etc., and not sheathed as in the manner of corespun products. Land actually double sheaths his two-element core for better isolation, for example at col. 4, lines 21-24 describes that, "The outer surface of the double corespun yarn has the appearance and general characteristics of the ... fibers forming the second sheath." It would be patently impossible to construct the cover factors and weave weights described and claimed by this Applicant with the Land product. For all of these reasons, Applicant urges Land be withdrawn as a reference and the rejection dropped as to all claims.

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There is no objective reason for combining Land and Howland in this context, given the inherent limitations of corespun geometry. Applicant urges the combination be withdrawn and the rejection dropped as to all claims.

In paragraph 6 of the Office Action, the Office rejected Claims 138-141, 143, 147, 148, 150-152, 154-157, 162, 164-191, and 194-198 under 35 USC 103(a) as being unpatentable over US Patent No. 5,033,262 issued to Montgomery et al. in view of the '264 issued reference.

Applicant again invokes its comments regarding 35USC103, corespun constructions, Zhu, Land, Howland, improper combinations, the prosecution history, and the interview, and states further that Montgomery is yet another example of corespun construction, and not a likely candidate for combination with Howland's '264 in the context of the claims as amended. The invention includes a core bundle within a core bundle, both sheathed in the spin-on manner and characterized at col. 2, lines 12-19, as "The fibers of the core and the core wrapper extend primarily in the axial direction and longitudinally of the corespun yarn to impart high tensile strength to the yarn. The fibers of the *outer sheath extend primarily in a circumferential direction around* (italics added) the corespun yarn and impart the conventional type of surface characteristics to the corespun yarn and the fabric formed therefrom." This contrasts with this Applicant's invention in which intimately blended fibers are laid together longitudinally so that both are exposed at various points in the fiber bundle, each being used for its particular benefit. Applicant urges Montgomery, the combination, and the rejection be withdrawn as to all claims.

In paragraph 7 of the Office Action, the Office rejected Claims 192-193 under 35 USC 103(a) as being unpatentable over Zhu's '175 in view of Howland's 264 and further in view of US Patent No. 5,853,885 issued to Prickett. Applicant invokes its prior comments and asserts again that the Zhu-Howland combination is unlikely and improper as a basis for this rejection, and these claims depend on allowable parent claims and are therefore allowable for any or all of the previously remarked reasons.

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In paragraph 8 of the Office Action, the Office rejected Claim 148 under 35 USC 103(a) as being unpatentable over the Land '759 reference in view of the Howland '264 reference in further view of US Patent No. 6,562,741 issued to Lilani. It is interesting to note that the Office here continues to analogize the claimed invention as corespun when it states that "Land does not disclose the *core material*...." Applicant invokes its prior comments in their entirety and urges for all the aforementioned reasons that Land, the Land-Howland combination, and the rejection be withdrawn.

In paragraph 9 of the Office Action, the Office rejected Claims 192-193 under 35 USC 103(a) as being unpatentable over the Land '759 reference in view of the Howland '264 reference in further view of the Prickett's '885 reference. Land is obviously corespun art, no more suitable than other corespun art as a sole basis for rejection or for combination with Howland or Howland and Prickett. Applicant invokes its prior comments in their entirety and urges for all the aforementioned reasons that Land, the Land-Howland combination, and the Land-Howland-Prickett and the rejection be withdrawn.

In paragraph 10 of the Office Action, the Office rejected Claims 192-193 under 35 USC 103(a) as being unpatentable over the Montgomery '262 reference in view of the Howland '264 reference in further view of the Prickett '885 reference. Office acknowledges Montgomery to be corespun. Applicant invokes its prior comments in their entirety, asserts Montgomery to be no more suitable than the other cited corespun art to obviate the claimed invention, and no objective reason for combining it with Howland in the context of these claims. For all the aforementioned reasons, Applicant urges that Montgomery, the Montgomery-Howland combination, the Montgomery-Howland-Prickett combination, and the rejection be withdrawn.

Applicant acknowledges the Kolmes '940 reference as well.

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is

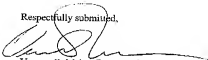
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added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,



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